

Claims

1. A method for testing a handover function between cells covered by the base station radio apparatuses in a mobile communication system, the mobile communication system at the least including a mobile station, base station radio apparatuses that perform communication with the mobile station and a radio base station control apparatus that controls transmission powers for the base station radio apparatuses, wherein the method comprising:

a step of calculating a difference between levels of reception fields for the base station radio apparatuses that cover the cells for which the handover test of the mobile terminal is to be performed;

a step of controlling transmission powers of the base station radio apparatuses so that a difference is equal to or smaller than a predetermined threshold value; and

a step of performing the handover function test between the cells covered by the base station radio apparatuses, the difference between the levels of the reception fields of which is equal to or smaller than the threshold value.

2. A method according to claim 1, wherein at the step of controlling transmission powers, the transmission power of the base station radio apparatus for which the difference has been calculated and for which the level of the reception field is high is controlled, so that the difference is equal to or smaller than the predetermined value.

3. A method according to claim 1 or 2, wherein the method further comprises:

a step of measuring reception field levels of the mobile terminal;

a step of notifying the radio base station control apparatus of the

measured reception field levels;

a step of calculating a difference between the reception field levels that are notified;

5 a step of comparing a difference in the thus calculated reception field levels with the threshold value;

a step of, when the difference is greater than the threshold value, calculating an adjusted value to control transmission powers of the base station radio apparatuses, so that the difference is equal to or smaller than a predetermined threshold value; and

10 a step of employing the adjusted value to control the transmission powers of the base station radio apparatuses.

4. A spectrum spread mobile communication system comprising mobile station, base station radio apparatuses that perform communication with the mobile station and a radio base station control apparatus that controls
15 transmission powers for the base station radio apparatuses, and performing a handover function test between cells covered by the base station radio apparatuses,

wherein the radio base station control apparatus calculates a difference between levels of reception fields for the base station radio apparatuses that
20 cover the cells for which the handover test of the mobile terminal is to be performed and controls transmission powers of the base station radio apparatuses so that the difference is equal to or smaller than a predetermined threshold value, the handover function test being performed between the cells covered by the base station radio apparatuses, for which the difference between
25 the levels of the reception fields is equal to or smaller than the threshold value.

5. A spectrum spread mobile communication system according to claim 4, wherein the radio base station control apparatus controls the transmission power of the base station radio apparatus, for which the difference

has been calculated and for which the level of the reception field is high, so that the difference is equal to or smaller than the predetermined value.

6. A spectrum spread mobile communication system according to claim 5, wherein the radio base station control apparatus includes:

5 reception field level determination means, for identifying reception field levels at the mobile terminal;

reception field level difference calculation means, for calculating a difference in the reception field levels identified by the reception field level determination means;

10 reception field level difference comparison means, for comparing the difference in the reception field levels obtained by the reception field level difference calculation means with the threshold value;

adjusted value calculation means, for, when as the comparison result obtained by the reception field level difference comparison means a difference is greater than the threshold value, calculating an adjusted value to control the transmission powers of the base station radio apparatuses, so that the difference is equal to or smaller than a predetermined value;

15 transmission power control value calculation means, for employing the adjusted value obtained by the adjusted value calculation means to calculate a transmission power control value for controlling the transmission powers of the base station radio apparatuses; and

20 transmission power control means, for controlling the transmission powers of the base station radio apparatuses based on the transmission power control values obtained by the transmission power control value calculation means.